

REVIEW

Vergleichende Untersuchungen der Holzstruktur ausgewählter Mimosoideae und Caesalpinioideae (Leguminosae) Westafrikas. Alexa Höhn, 141 pp. + appendix of 91 pp., including 31 plates, 1997. Thesis (unpublished), Johann Wolfgang Goethe University, Frankfurt am Main, Germany.

This thesis (*Diplomarbeit*) gives a detailed analysis of the diagnostic value of wood anatomical features to separate species or species groups in a selection of 31 species (belonging to 23 genera) of Mimosoideae and Caesalpinioideae growing in the savanna region of West Africa. Interestingly the study was carried out in the framework of a multidisciplinary programme on cultural development and linguistic history in the West African savanna region. It is encouraging to see that, while in botany the role of systematic wood anatomy seems to be rapidly replaced by molecular systematics, wood anatomy has conquered a crucial niche in archeobotanical research.

Of most species six samples were studied: four of mature wood, two of branchwood (less than 4 cm in diameter). Detailed species descriptions, illustrated with fine micrographs, are given in the appendix. The descriptions were generated using DELTA, and employing the IAWA Hardwood Feature List. In the main text 18 wood anatomical types are recognised, illustrating the limitations of wood anatomical diversity patterns to identify down to the level of species, genera or even subfamilies. Of the 18 types, 14 are restricted to single genera, 3 types cover two genera each, and one type occurs in 3 genera representing both subfamilies. The results of the analysis are discussed in great detail, and in the methodology section there is a welcome, critical evaluation of some of the recommendations in the IAWA List of microscopic features for hardwood identification. There is also a preliminary analysis of the diagnostic value and limitations of the morphology of vestures in intervessel pits. Surprisingly, *Dialium guineense* lacks vestures altogether.

Let us hope that the substance of this fine thesis will soon be made available in a more accessible publication.

[P. B.]